### CHIGNIK MANAGEMENT AREA HERRING SAC-ROE FISHERY MANAGEMENT PLAN 1990

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#### INTRODUCTION

### Description of Area

The Chignik Management Area lies on the south side of the Alaska Peninsula between the Kodiak Management Area to the east and the Alaska Peninsula Management Area to the west. Kilokak Rocks is the eastern boundary and Kupreanof Point is the western boundary. The area is subdivided into the Eastern, Central, Chignik Bay, Western and Perryville Districts (Figure 1).

### History of the Herring Fishery

At the inception of the Alaska Peninsula herring fishery, Chignik area catches were grouped with catches from north and south peninsula areas and labeled as Southwestern Alaska catches. The earliest recorded commercial herring fishery occurred in 1906. Annual Southwestern Alaska herring catches for the early 1900's did not exceed 500 tons. A small herring saltery was operated at Lake Bay in the Chignik Bay District during the early 1930's. Herring were harvested with beach seines and salted for future resale. No further breakdown of catch by area is available. The herring fisheries ceased in the late 1930's and did not commence again until 1980, when the sac-roe fishery was initiated.

The herring sac-roe fishery in the Chignik Area began in 1980. Although the current sac-roe fishery may not be fully developed,

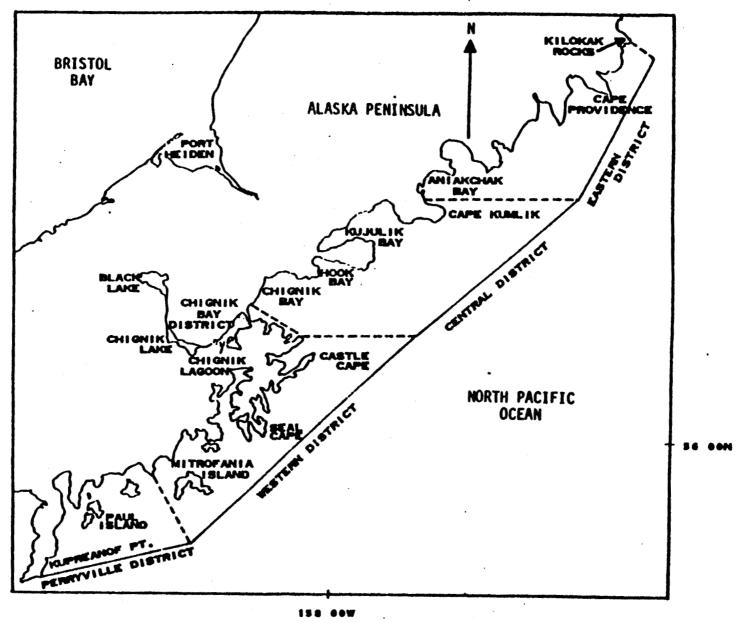


Figure 1. Map of the Chignik Management Area with the statistical fishing districts and some prominent locations identified.

exploration and effort levels suggest that it will continue to be a relatively low participation, low yield fishery.

#### Management Strategy

Sac-Roe Fishery

Several known geographic areas support the majority of Chignik's spawning biomass and the herring in each of these areas are managed as discrete stocks.

The annual harvest for each identified stock is dependent upon previous year biomass estimates and an exploitation rate of 0-20% of the available spawning biomass. The annual exploitation is dependent on evaluation of individual stock status, recruitment, and age composition. By regulation, the herring sacroe season extends from 15 April through 30 June. management stipulates alternating 24 hour fishing periods, and 24 hour closures. Each fishing period will begin at 1200 hours (12:00 noon) on odd numbered days throughout the regulatory season and close at 1200 hours (12:00 noon) on even numbered days or when the harvest level for an individual stock is achieved. Pre-season harvest projections may differ from actual harvest levels if inseason information suggests the spawning biomass of discrete stocks differ significantly from anticipated levels.

The fishery is monitored through contact with fishermen and aerial observations of the herring biomass, as well as daily contact with local processors.

An important element in the management of the Chignik herring fishery comes from the information collected by fishermen and commercial spotters. This cooperation is definitely encouraged and all exchange of information will be confidential.

#### 1990 CHIGNIK AREA HERRING MANAGEMENT PLAN

#### I. Registration Requirements:

- a. <u>Tenders and Processors:</u> Each tender operator and buyer must register in person and obtain their registration packet containing statistical charts, etc. in Kodiak or Chignik prior to fishing (see regulation 5 AAC 27.540).
  - b. <u>Fishing Vessels</u>: There is no area registration requirements for fishing vessels in 1990.

## II. Regulations in Effect:

Refer to the 1990 Commercial Herring Regulation Booklet. 5 AAC 27.590. BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

(1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing herring;

### III. Guideline Harvest Level:

The Statewide policy of harvest on a 0-20 exploitation rate of the available spawning biomass will be followed.

Harvest levels will be determined in season on a bay by bay (stock by stock) basis. The commercial herring harvest from the Chignik Area has been declining since 1980. The harvest range for the past nine seasons has been 11 - 694 tons with an average of 184 tons.

The actual 1990 harvest will depend upon the biological condition of the stock, the amount of effort actively exploring throughout the area, and by the availability of local processing. However, it is not expected that the 1990 harvest will reach the nine year average harvest of 184 tons.

#### IV. Fishing Season:

- a. Herring may be taken from 15 April through 30 June.
- b. Herring may be taken only during periods established by emergency order.

#### V. Fishing Periods:

Initially, fishing periods will be 24 hours long beginning at 1200 hours (12:00 noon) on all odd numbered days and ending at 1200 hours (12:00 noon) on all even numbered days. The schedule will begin at 1200 hours (12:00 noon) 15 April. Any changes in this fishing schedule will be announced by emergency order.

## VI. Airplanes:

There is no restriction on the use of airplanes in the sac-roe herring fishery.

#### VII. Legal Herring Gear:

- a. 5 AAC 27.565. (a) Herring may be taken only by purse seines.
- b. 5 AAC 27.575. SEINE SPECIFICATIONS AND OPERATIONS. No purse seine may be more than 1,000 meshes in depth or more than 100 fathoms in length.

#### VIII. Tender and Processors Reporting Requirements:

a. All processors and tender operators will be required to report daily catch information to ADF&G. This can be accomplished either by radio (SSB) or telephone.

The Chignik ADF&G office will stand by on 4125 SSB and VHF CH6 frequencies, between 0800 hours - 1000 hours (8:00 -10:00 A.M.) and 2000 hours to 2200 hours (8:00 P.M. - 10:00 P.M.). The call sign for Chignik is KGB 76 "Chignik Weir", telephone number 845-2243.

If unable to contact ADF&G Chignik, your catch information should be given to ADF&G Kodiak or Sand Point via telephone or 4125 SSB. The call signs for Kodiak and Sand Point are WHM20 and WIM77 respectively.

Failure to report is a violation of commercial fishing regulations (5 AAC 27.590 (2)); vigorous enforcement of this regulation should be expected as a result of past harvest reporting deficiencies.

b. Because of the relatively small guideline harvest levels for some bays and districts, the fishing season will be promptly closed by emergency order whenever it appears that accurate catch information cannot quickly be obtained from the processors and tenders by radio or telephone. Prompt reporting will increase the likelihood of reopening certain areas if the summarized catches indicate that the desired guideline harvest levels have not been reached in a certain bay or district and if there are sufficient numbers of herring present in the bay to warrant a reopening.

## For Confidential Purposes:

Individual code sheets will be given to each tender/
processor for the purpose of reporting catch (tons) and
statistical area where herring were caught.

# IX. 1990 Management Strategy:

The 1990 Chignik herring management plan will incorporate some of the data collected during the 1980-1989 seasons. Harvest

levels are established only in those bays where historical biomass estimates and fishing effort dictate (Table 1).

The Big River Section has not received any appreciable recruitment of herring into that fishery since 1980.

The trend in this stock's age composition has regressed from a healthy 1980 biomass dominated by 4 and 5 year old fish to a diminished biomass in 1986 dominated by 8 and 9 year old fish. No significant recruitment has occurred in recent years. Consequently the Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1990.

Lake Bay 271-10 in the Chignik Bay District and Castle Bay 273-94 in the Castle Cape Section of the Western District will be very closely monitored in 1990.

Table 1. Guideline harvest levels (in tons) for the Chignik Management Area, 1990°.

Stat. Area	Guideline Management Unit	Harvest Levels	Required Spawn @20%	ing Biomass @10%
272-20	Amber Bay <sup>a</sup>	0	0	0
272-60	Aniakchak Bay	0	o	0
271-10	Anchorage Bay	100	500	1,000
273-94	Castle Bay	10	50	100
271-10	Chignik Lagoon	10	50	100
272-30	Hook Bay	10	50	100
275-50	Humpback Bay	20	100	200
275-40	Ivanof Bay	10	50	100
272-50	Kujulik Bay	10	50	100
271-10	Lake Bay	10	50	100
272-92	Port Wrangall	0	. 0	0
272-96	Agripina Bay	20	100	200
TOTAL		200	1,000	2,000

The specific statistical areas listed above are those that have a historical sac-roe harvest. The remainder of the Chignik Management Area is open for exploration and will be regulated within the statewide herring harvest policy of 0% to 20% of the available spawning biomass.

b The Big River Section (272-70 Amber Bay and 272-60 Aniakchak Bay) will remain closed in 1990.

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